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Mineral Industry Surveys

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LEAD IN MAY 1999

Mine production, based upon the net quantity of lead recovered in the smelting of concentrate, decreased by 3% in April compared with production in March. The figure for mine production in May was not available at the time of publication. Secondary refinery production decreased by 1% in May, and was down by about 3% compared with production in May 1998. Reported consumption was up by about 1% in May.

According to *Platt's Metals Week* published quotations, the average North American producer price and the average London Metal Exchange (LME) cash price (U.S. dollars) increased by 0.15% and 4.26%, respectively, in May. The increase in the LME price was said to be due largely to a general increase in the purchase of LME metals by investment funds anticipating better economic conditions (CRU International, 1999a).

Secondary lead producers in the United States reported some easing of the tight supply of spent battery scrap. However, the scrap market continued to be undersupplied as demand for replacement batteries declined in the post-winter slowdown period. Despite the current market conditions, most secondary producers have maintained production at or near recent levels (Metal Bulletin, 1999a).

In Europe, supplies of lead battery scrap appeared to be sufficient for current demand. In at least two countries, the purchase and/or importation of battery scrap had ceased temporarily, despite the slightly healthier lead market. Scrap prices remained firm in apparent anticipation of increased purchasing by secondary producers during the coming months. The producers, however, continued to be faced with low profit margins in the operation of their scrap processing plants, raising further concerns about the viability of these plants (CRU International, 1999b; Metal Bulletin, 1999c).

National Defense Stockpile cash disposal (sale) of lead in May was 3,860 metric tons (4,255 short tons). Sale of lead to date in fiscal year 1999 (October 1998 through May 1999), was 36,041 metric tons (39,728 short tons).

The Defense National Stockpile Center (DNSC) announced that, beginning in July 1999, the monthly sales offering of lead for the remainder of fiscal year 1999 will be increased to 4,500 metric tons (4,960 short tons). The monthly average sale of lead thus far in fiscal year 1999 was about 3,500 metric tons (3,860 short tons), excluding the quantity sold in negotiated long-term contracts in December 1998. The DNSC further announced that there will be no additional sales of lead in negotiated long-term contracts for the remainder of the fiscal year (U.S. Defense National Stockpile Center, 1999).

The U.S. Department of Housing and Urban Development (HUD) has noted that its recent request for public comment on its proposed information collection requirements, as authorized under section 1012 (Federal assistance housing) and section 1013 (Federally owned housing) of the Residential Lead-based Paint Hazard Reduction Act, was published in error. A newly designated 60-day public comment request on the information collection requirements will be published when the final rule for the requirements is published. It is anticipated that this final rule will be published in the very near future (U.S. Department of Housing and Urban Development, 1999c).

In other action by HUD, the agency published a request for public comment on proposed information collection requirements pertaining to (1) a review of currently available lead-based paint encapsulants and use patterns in the control of residential lead-based paint hazards (U.S. Department of Housing and Urban Development, 1999a), and (2) the formulation of training materials and guidance on interpreting lead-based paint inspection and risk assessment reports (U.S. Department of Housing and Urban Development, 1999b).

The Lead Industries Association, Inc. (LIA) recently announced the results from the second year of a 5-year voluntary industry initiative designed to lower the threshold blood lead levels for removal and return of employees working in high-lead exposure areas. Under current Occupational Safety and Health Administration (OSHA) standards, employers are required to relocate a worker to an area of lower lead exposure when the

worker's average blood lead concentration is at or above 50 micrograms per 100 grams of whole blood, and the worker may be returned to the initial work area when the blood lead level reaches 40 micrograms per 100 grams of whole blood. The industry initiative calls for a stepwise reduction of 2 micrograms per 100 grams of whole blood per year in the worker relocation requirement, and a reduction of 1 microgram per 100 grams of whole blood per year before a worker may be returned to the initial work area. According to a spokesperson for the LIA, success of the program is partially shown by the fact that the number of workers with blood lead levels at or above 40 micrograms per 100 grams of whole blood has declined from 303 in 1996 to 160 in 1998. During this same period there has been an increase in the number of workers relocated, under the more stringent blood lead requirements, from 28 in 1996 to 61 in 1998 (International Lead Zinc Research Organization, Inc., 1999).

Exide Corp., Reading, PA, recently announced that it will be the exclusive supplier of starting-lighting-ignition batteries to the Philadelphia, PA-based auto parts dealer, Pep Boys. The new contract will provide Exide with an additional market for 1.4 million batteries in Pep Boys outlets in western United States. Exide currently supplies 1.3 million batteries to Pep Boys stores in eastern United States. Exide's contract with Pep Boys is for 5 years and replaces that which was held by GNB Technologies Inc., Atlanta, GA (Ryan's Notes, 1999).

In China, plans to increase lead production and exports have been reported by several companies. Yuguang Gold and Lead Group in Henan Province, expects to produce 60,000 tons of refined lead in 1999, up 11% from the previous year, and to raise exports to 50% of production from the current 40%. The company further plans to increase production capacity to 100,000 tons by 2001. In Yunnan Province, Kunming Smelter revised its 1999 lead production target to 65,000 tons, 5,000 tons more than it had originally forecast. The higher production is partly attributed to the completion of a renovation project in 1999 that increased lead production capacity to 6,400 tons per month from the previous 3,800 tons per month. Kunming expects to export 3,000 tons of lead per month, three times its original projection. Hanjiang Smelter in Hubei Province anticipates that it will produce 45,000 tons of lead in 1999, up 15,000 tons from the previous year. Exports to southeast Asian countries increased by 20% in 1998. Production capacity at Hanjiang will be increased to 50,000 tons per year from the current 30,000 tons per year, upon completion of an expansion project in mid-1999. Shikoushan Mining Administration in Hunan Province plans to produce 45,000 tons of lead in 1999, up 5,000 tons from 1998, and expects to raise capacity an additional 5,000 tons per year by 2000. In northern China's Hebei Province, the first phase of an expansion program has been completed at Baoding Feng Fan Lead Factory, increasing the plant capacity by 8,000 tons from the previous 10,000 tons per year. Another 2,000 tons of capacity will be added in a second expansion phase, but a timetable has not been set for completion of this phase. The majority of Baoding Feng Fan's lead is consumed by its Chinese subsidiaries in the production of lead-acid batteries.

With respect to China's secondary lead operations, the country plans to restructure the industry, eliminating small-scale enterprises that are presenting environmental difficulties. According to an official of Hubei Jinyang Metallurgical Company, China plans to reduce the number of lead recycling facilities to 100, a 60% decrease, by 2002. Of the currently operating secondary plants, only three are said to have an output capacity of 10,000 tons per year or more (Platt's Metals Week, 1999).

The Bulgarian Privatization Agency reportedly is close to reaching a decision on an offer from an undisclosed Turkish metals company to purchase KCM, Bulgaria's largest lead and zinc smelter, located near Plovdiv. The Turkish offer was the lone bid received for KCM by the mid-May deadline. Bulgarian Government officials were said to be considering the bidder's investment plan for KCM in conjunction with the results of a special advisory study before making a final decision on the sale. KCM officials indicated that the smelter is currently being operated at or near its production capacity of 55,000 tons per year of zinc and 40,000 tons per year of lead.

In a related effort by Bulgaria to privatize its lead-zinc operations, it is anticipated that the Kardjali Lead and Zinc Combine will undergo a change in ownership in the near future, according to Privatization Agency sources. A consortium headed by management and employees of the smelter has been successful in its attempt to secure a 57% share in Kardjali, and a final contract has been prepared for signing by Bulgaria's Council of Ministers (Metal Bulletin, 1999e).

In India, recyclers of lead battery scrap are optimistic that a report to be submitted by a special committee studying the effects of the partial ban on imports of lead-acid battery scrap and zinc ash will recommend that the ban be lifted. The ban currently allows only five companies to import these materials. With respect to the import of zinc ash, an open general license (OGL) scheme is expected to be placed in effect in the near future that will permit only companies with certified environmentally sound processing facilities to import zinc ash. Battery scrap processors are hopeful that the committee report will recommend that they also be able to apply to become approved scrap processing facilities under the OGL scheme. Should such approval be obtained, the battery scrap processors are said to be preparing to increase India's annual production of secondary lead by 40,000 tons per year. Meanwhile, the Indian Ministry of Environment has formed a group to suggest methods to improve the collection of spent batteries by approved battery scrap processors. In addition, a program to attract the spent batteries to environmentally friendly processing units through legislative means is under discussion, but details on such a program are expected to take considerable time to prepare (Metal Bulletin, 1999b).

Update

Negotiations were terminated recently between Quexco, the Texas-based holding company whose assets include RSR Corp., Dallas, TX, a secondary lead producer, and GNB Technologies Inc., a secondary lead and lead-acid battery producer, ending Quexco's 18-month effort to purchase GNB's lead operations. According to a Quexco spokesperson, the company was unable to reach agreement with GNB's Australian-based parent company, Pacific Dunlop, regarding certain contractual terms (Metal Bulletin, 1999d).

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———1999c, Withdrawal of request for comment on notice of proposed information collection regarding lead-based paint hazard reduction: Federal Register, v. 64, no. 86, May 5, p. 24167-24168.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES 1/

(Metric tons)

	1998		1999		
	January - December p/	January - May	April	May	January - May
Production:					
Mine (recoverable)	449,000	183,000	43,100	NA	172,000 2/
Primary refinery 3/	NA	144,000	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,080,000	452,000	88,300	87,500	432,000
Estimated	18,400	7,740	1,480	1,460	7,120
Recovered from copper-base scrap e/	15,000	6,250	1,250	1,250	6,250
Total secondary	1,110,000	466,000	91,000	90,200	446,000
Stocks, end of period:					
Primary refineries	XX	XX	NA	NA	XX
Secondary smelters and consumers	XX	XX	62,300 r/	65,400	XX
Imports for consumption:					
Ore and concentrates (lead content)	32,700	5,920	--	NA	1,950 2/
Refined metal	267,000	107,000	23,300	NA	89,700 2/
Consumption:					
Reported	1,500,000	627,000 r/	123,000	124,000	622,000
Undistributed e/	46,400	19,400 r/	3,800	3,850	19,200
Total	1,550,000	646,000 r/	127,000	128,000	641,000
Exports (lead content):					
Ore and concentrates	72,400	10,100	1,180	NA	6,460 2/
Bullion	51,600	12,500	166	NA	16,500 2/
Materials excluding scrap	39,600	15,700	3,040	NA	11,200 2/
Ash and residues	9,030	2,950	79	NA	621 2/
TEL/TML preparations, based on lead compounds	3,180	1,040	762	NA	1,310 2/
Exports (gross weight): Scrap	99,200	35,300	7,550	NA	35,200 2/
Platt's Metals Week North American producer price (cents per pound)	45.27	45.33	43.77	43.84	43.76

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.
1/ Data are rounded to three significant digits, except prices; may not add to totals shown.
2/ Includes data for January - April only; May data not available at time of publication.
3/ Data from American Bureau of Metal Statistics, Inc. (ABMS).

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price	LME		Sterling exchange rate
	cents/lb	$/metric ton	£/metric ton	dollars/£
1998:				
May	45.31	543.11	331.52	1.638240
Average January - May	45.33	544.37	329.92	1.649645
Year average	45.27	528.22	318.86	1.657086
1999:				
February	43.75	513.33	315.38	1.627637
March	43.73	507.52	313.33	1.621322
April	43.77	518.98	322.58	1.608850
May	43.84	541.12	334.97	1.615410
Average January - May	43.76	514.56	316.88	1.624594

Source: Platt's Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP IN MAY 1999 1/

(Metric tons, gross weight)

Item	Stocks April 30, 1999	Net receipts	Consumption	Stocks May 31, 1999
Battery-lead	18,600	91,800	92,600	17,800
Soft lead	W	W	W	W
Drosses and residues	3,340	5,380	5,400	3,320
Other 2/	2,260	1,960	1,610	2,610
Total	24,200	99,100	99,600	23,700
Percent change from preceding month	XX	-7.4	-7.5	-1.9

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.
1/ Data are rounded to three significant digits; may not add to totals shown.
2/ Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE SCRAP IN MAY 1999 1/

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	46,800	--	--
Remelt lead	W	W	W
Antimonial lead	34,200	W	W
Other 2/	W	W	--
Total lead-base	87,500	37	235

W Withheld to avoid disclosing company proprietary data; included in "Total."
1/ Data are rounded to three significant digits.
2/ Includes cable lead, lead-base babbitt, solder, type metals, and other products

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES 1/

(Metric tons, lead content)

Uses	1998		1999		
	January - December p/	January - May	April	May	January - May
Metal products:					
Ammunition-shot and bullets	40,700	20,800 r/	3,660 r/	3,790	18,800
Brass and bronze-billet and ingots	5,420	2,340	481	467	2,320
Cable covering-power and communication and calking lead-building construction	5,080	2,950 r/	341 r/	247	1,150
Casting metals	5,140	2,280 r/	444 r/	417	2,160
Pipes, traps, and other extruded products	(2/)	(2/)	(2/)	(2/)	(2/)
Sheet lead	17,200	7,300 r/	2,110 r/	2,080	10,500
Solder	7,460	3,210 r/	1,470 r/	1,260	6,960
Storage batteries, including oxides	1,350,000	557,000 r/	109,000	111,000	552,000
Terne metal, type metal, and other metal products 3/	4,060	3,990 r/	181 r/	211	924
Total metal products	1,430,000	599,000 r/	117,000 r/	119,000	595,000
Other oxides	(4/)	(4/)	(4/)	(4/)	(4/)
Miscellaneous uses	65,700	27,400	5,380	5,420	27,200
Total reported	1,500,000	627,000 r/	123,000	124,000	622,000
Undistributed consumption e/	46,400	19,400 r/	3,800	3,850	19,200
Grand total	1,550,000	646,000 r/	127,000	128,000	641,000

e/ Estimated. p/ Preliminary. r/ Revised.
1/ Data are rounded to three significant digits; may not add to totals shown.
2/ Withheld to avoid disclosing company proprietary data; included with "Sheet lead."
3/ Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.
4/ Withheld to avoid disclosing company proprietary data; included with "Miscellaneous uses."

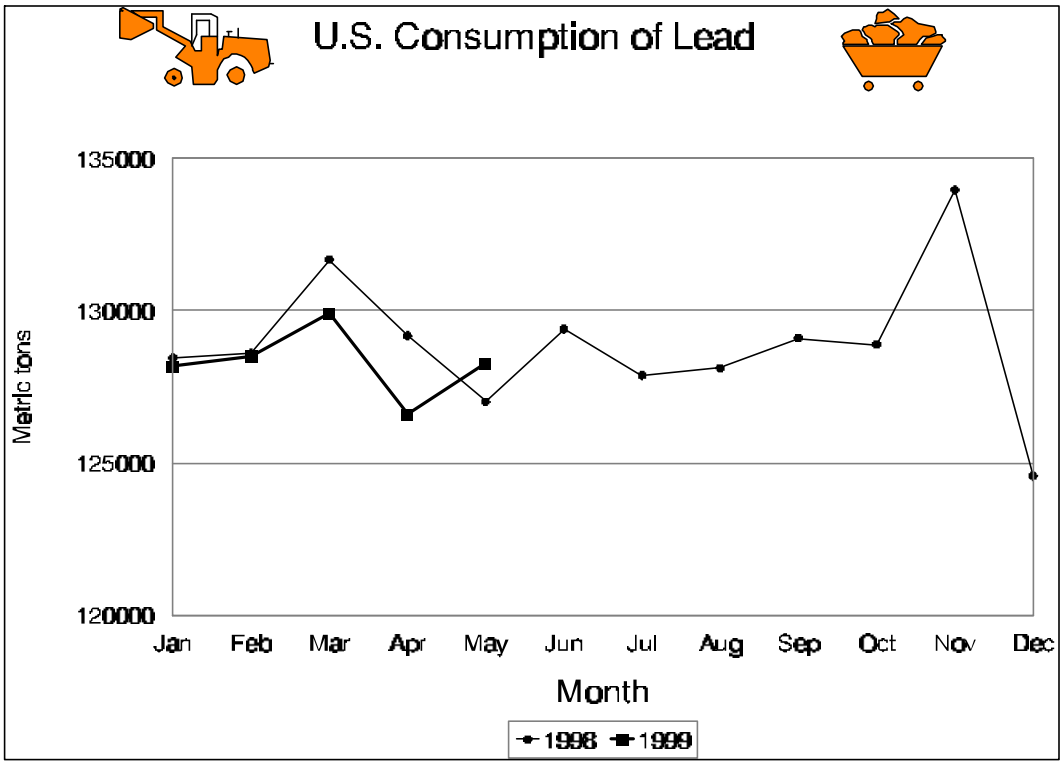

TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD IN MAY 1999 1/

(Metric tons, lead content)

Type of material	Stocks April 30, 1999	Net receipts	Consumption	Stocks May 31, 1999
Soft lead	27,500 r/	73,900	71,500	29,900
Antimonial lead	28,300 r/	32,200	31,500	29,000
Lead alloys	W	21,000	21,000	W
Copper-base scrap	W	381	381	W
Total	62,300 r/	127,000	124,000	65,400

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Total."
1/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS 1/

(Metric tons)

	1998	1999		
	Year total	April	March	April	January - April
Lead content:					
Ore and concentrates	72,400	3,750	2,760	1,180	6,460
Bullion	51,600	3,210	3,770	166	16,500
Materials excluding scrap	39,600	3,780	3,030	3,040	11,200
Ash and residues	9,030	411	153	79	621
TEL/TML preparations, based on lead compounds	3,180	68	320	762	1,310
Total	176,000	11,200	10,000	5,230	36,100
Gross weight: Scrap	99,200	6,350	7,120	7,550	35,200

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 8
U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN 1/

(Metric tons, lead content)

Country of origin	General imports					Imports for consumption				
	1998		1999			1998		1999		
	Year total	January - April	March	April	January - April	Year total	January - April	March	April	January - April
Ore, matte, etc.:										
Bolivia	478	478	--	--	--	--	--	--	--	--
Canada	32,000	25,500	--	--	1,220	6,540	--	--	--	--
Peru	35,800	3,880	292	--	787	18,500	1,780	--	--	--
Other	20,500	5	3,170	3,180	8,310	7,670	5	87	--	1,950
Total	88,800	29,800	3,460	3,180	10,300	32,700	1,790	87	--	1,950
Base bullion:										
Dominican Republic	464	154	--	--	--	464	154	--	--	--
Total	464	154	--	--	--	464	154	--	--	--
Pigs and bars:										
Belgium	30	30	--	--	--	30	30	--	--	--
Canada	181,000	56,900	17,900	16,900	70,100	181,000	56,900	17,900	16,900	70,100
Germany	135	--	37	18	113	135	--	37	18	113
Mexico	63,600	27,600	3,760	4,460	16,300	63,600	27,600	3,760	4,460	16,300
Peru	11,400	500	--	--	543	11,400	500	--	--	543
United Arab Emirates	59	10	--	--	--	59	10	--	--	--
Other	10,100	82	233	1,910	2,610	10,100	82	233	1,910	2,610
Total	267,000	85,200	21,900	23,300	89,700	267,000	85,200	21,900	23,300	89,700
Reclaimed scrap, including ash and residues	(2/)	(2/)	--	--	--	(2/)	(2/)	--	--	--
Grand total	356,000	115,000	25,400	26,500	100,000	300,000	87,100	22,000	23,300	91,700

1/ Data are rounded to three significant digits; may not add to totals shown.
2/ Less than 1/2 unit.

Source: Bureau of the Census.